

No.

7300068



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Asgrow Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE  
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *seventeen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

MUSKMELON

'Gusto 45'



Attest:

*Ernest K. Lane*  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed  
at the City of Washington  
this 11th day of March in  
the year of our Lord one thousand nine  
hundred and eighty.

*W. B. Bly*  
Secretary of Agriculture

AMENDED

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

1. VARIETY NAME OR TEMPORARY DESIGNATION <u>3-30-73</u> <del>XP 750</del> <u>GUSTO 45</u>		2. KIND NAME <u>MUSKMELOW</u> <i>rf</i> <del>Cantaloupe</del>		FOR OFFICIAL USE ONLY PVPO NUMBER <u>73068</u>	
3. GENUS AND SPECIES NAME <u>Cucumis melo</u>		4. FAMILY NAME (Botanical) Cucurbitaceae		FILING DATE <u>3-8-73</u>	TIME <u>3:30</u> A.M.
		5. DATE OF DETERMINATION 1967		FEE RECEIVED \$ <u>250</u>	CHARGES 12-5-77 \$250.00 1-9-80 \$250.00
6. NAME OF APPLICANT(S) Asgrow Seed Company		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) Kalamazoo, Michigan 49001			8. TELEPHONE AREA CODE AND NUMBER (616) 382-4000
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. STATE OF INCORPORATION Delaware		11. DATE OF INCORPORATION March 22, 1968
12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:  <i>OK</i> <i>rf</i> <u>Mr. John A. Batcha</u> <u>Asgrow Seed Company</u> <u>9620-190-1</u> <u>Kalamazoo, Michigan 49001</u> <del><u>Mr. G. Allen R. Foster</u></del> <del><u>9620-190-1</u></del> <del><u>Kalamazoo, Michigan 49001</u></del>					

## 13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

☒ 12A. Exhibit A, Origin and Breeding History of the Variety (See Section 52, P.L. 91-577)☒ 12B. Exhibit B, Botanical Description of the Variety☒ 12C. Exhibit C, Objective Description of the Variety☒ 12D. Exhibit D, Data Indicative of Novelty☒ 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. (See Section 52, P.L. 91-577).

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? (See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? ☐ YES ☒ NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed?

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

February 28, 1973  
(DATE)

(DATE)

John A. Batcha  
(SIGNATURE OF APPLICANT)  
John A. Batcha  
Assistant to the President  
(SIGNATURE OF APPLICANT)

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Plant Variety Protection Application  
Asgrow Seed Company  
Cantaloupe - ~~XP-750~~ *EUSTO 45*  
February 28, 1973

EXHIBIT A

ORIGIN AND BREEDING HISTORY OF THE VARIETY

1951	Parent A. PMR 95 x PMR 45 Parent B. PMR 95 x SR 91 Each parent reselected through F <sub>4</sub> generation.
1959	(A) (PMR 95 x PMR 45) x PMR 95 X (B) PMR 45 x SR 91
1960	F1
1961	F2
1962	F3
1964	F4
1965	F5
1966	F6 Stock seed increase begun
1967	Evaluation
1968	F7 Further seed stock increase.
1969	Further evaluation.
1970	Further evaluation.
1971	Further evaluation.
1972	Further evaluation

Evaluations made of this variety since 1967 indicates it is stable.  
VARIANTS ARE WELL WITHIN COMMERCIAL LIMITS. AS WITH SOME COMMERCIAL  
VARIETIES WHEN PRODUCED UNDER WEATHER STRESS CONDITIONS, SOME FRUIT  
CAN BE SLIGHTLY ELONGATED, NET CAN BE SPARSE AND MATURITY  
SOMEWHAT DELAYED. *RJS*



Asgrow Seed Company  
subsidiary of The Upjohn Company

Kalamazoo, Michigan 49001

# 73068

March 6, 1979

EXHIBIT A SUPPLEMENT *rf's*

Robert J. Snyder  
Examiner, Plant Variety  
Protection Office, National Agri. Library Bldg.  
Beltsville, Maryland 20705

Dear Mr. Snyder:

The following information is supplied concerning your letter of January 12, 1979 relating to application 73068 Cantaloupe Gusto 45.

During the selection process involved in the development of Gusto 45 there were several objectives. We were interested in developing an improved shipping type melon which had acceptable fruit quality and greater disease resistance. Characteristics which were evaluated and considered were shape, net, sutures, rind toughness, shipping quality, flavor and resistance to cantaloupe diseases.

Please contact me should you require further information.

Sincerely,

John A. Batcha, Manager  
Inventory Management

JAB/rb

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Plant Variety Protection Application  
Asgrow Seed Company  
Cantaloupe - ~~XP-750~~ EUSTO 45  
February 28, 1973

EXHIBIT B

BOTANICAL DESCRIPTION OF THE VARIETY.

A cultivar of *cucumis melo* var. *reticulatus*. It is andromonoecious.  
Vine vigorous. Fruit is oval, heavily netted with few distinct sutures.  
Fruit cavity is small and dry. Flesh is thick and orange in color.  
Fruit dehisces from vine while flesh is still firm and the seed cavity  
is dry.

Exhibit **B** *R/S*

Novelty Statement

To our knowledge the variety most similar to Gusto 45 is No. 45SJ. The characteristic which distinguish Gusto 45 from No. 45SJ includes but is not restricted to the following.

Gusto 45 is tolerant to two races of powdery mildew <sup>(RACES 1 AND 2) R/S</sup> found in the Imperial valley of California while No. 45SJ is susceptible to one of them. <sup>(RACE 2)</sup> Adjacent plantings in 1978 in 10 locations in areas showed a marked contrast in the two varieties when the disease was present. Foliage of Gusto 45 was green and healthy while No. 45SJ was infected. This infection affected No. 45SJ to the extent that fruit set beyond the crown set was reduced and marketable fruit production was reduced. Yield of marketable fruit in 10 different trials was as follows:

<u>Number of Marketable Fruits per 100 Foot Plot</u>		
<u>Plot Number</u>	<u>Gusto 45</u>	<u>No. 45SJ</u>
1	246	220
2	312	214
3	301	231
4	285	237
5	320	245
6	327	198
7	279	223
8	298	200
9	314	241
<u>10</u>	<u>277</u>	<u>235</u>
Average	301	224

The article "Cantaloupes 6 & 7" by Thomas W. Whitaker and Glen N. Davis published February 1946 in the Southern Seedsman describes the presence of two strains of powdery mildew in the Imperial valley of California.

NAME OF APPLICANT(S)  Asgrow Seed Company	VARIETY NAME OR TEMPORARY DESIGNATION  Gusto 45
ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)  Kalamazoo, Michigan 49001	FOR OFFICIAL USE ONLY PVPO NUMBER  73068 R/S

Place the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g.  or ) when number is either 99 or less.

## 1. TYPE:

1 = PERSIAN 2 = HONEY DEW 3 = CASABA 4 = CRENSHAW 5 = COMMON OR SUMMER  
6 = OTHER \_\_\_\_\_

## 2. AREA OF BEST ADAPTATION IN U.S.A.

1 = SOUTHEAST 2 = NORTHEAST/NORTHCENTRAL 3 = SOUTHWEST 4 = MOST AREAS

## 3. MATURITY (FROM SEEDING TO HARVEST):

<input type="text" value=""/> <input type="text" value=""/> <input type="text" value=""/>	DAYS	<input type="checkbox"/>	1 = FORDHOOK GEM (EARLY)
<input type="text" value=""/> <input type="text" value=""/>	NO. DAYS EARLIER THAN	<input type="checkbox"/>	2 = DELICIOUS 51 (MIDSEASON)
<input type="text" value=""/> <input type="text" value=""/>	NO. DAYS LATER THAN	<input type="checkbox"/>	3 = HONEY DEW (LATE)
		<input type="checkbox"/>	4 = OTHER (Specify) _____

## 4. PLANT:

1 = ANDROMONOECIOUS 2 = MONOECIOUS 3 = GYNOECIOUS 4 = OTHER \_\_\_\_\_  
 1 = VINE 2 = SEMI-BUSH 3 = BUSH

## 5. LEAF (MATURE BLADE OF THIRD LEAF)

SHAPE: 1 = ORBICULAR 2 = OVATE 3 = RENIFORM  
 1 = NOT LOBED 2 = SHALLOWLY LOBED 3 = DEEPLY LOBED  
 1 = LIGHT GREEN (HONEY DEW) 2 = MEDIUM GREEN 3 = DK. GREEN (RIO GOLD)  
 mm LENGTH  mm WIDTH  
 SURFACE: 1 = PUBESCENT 2 = GLABROUS 3 = SCABROUS

## 6. FRUIT (AT EDIBLE MATURITY):

cm LENGTH  cm DIAMETER  gm WEIGHT  
 SHAPE: 1 = OBLATE 2 = OVAL 3 = ROUND 4 = ELONGATE-CYLINDRICAL 5 = SPINDLE 6 = ACORN  
 SURFACE: 1 = SMOOTH 2 = NETTED 3 = CORRUGATED 4 = WARTED  
 BLOSSOM SCAR: 1 = OBSCURE 2 = CONSPICUOUS  
 RIBS: 1 = ABSENT 2 = PRESENT  
 NO. RIBS PER FRUIT  mm RIB WIDTH AT MEDIAL ☐ RIBS: 1 = SMOOTH 2 = NETTED  
SUTURES:  
 1 = SHALLOW (GOLDEN DELIGHT) 2 = MEDIUM 3 = DEEP (HACKENSACK)  
 1 = SMOOTH 2 = NETTED  
 SHIPPING QUALITY: 1 = POOR (HOME GARDEN) 2 = FAIR (SHORT DISTANCE SHIPPING)  
3 = EXCELLENT (LONG DISTANCE SHIPPING)  
 FRUIT ABSCISE: 1 = WHEN RIPE 2 = WHEN OVERRIPE 3 = DO NOT ABSCISS

## 7. RIND NET:

3	1 = ABSENT	2 = SPARSE	3 = ABUNDANT
2	DISTRIBUTION: 1 = SPOTTY 2 = COVERS ENTIRE FRUIT		
2	COARSENESS: 1 = FINE 2 = MEDIUM COARSE 3 = VERY COARSE		
3	INTERLACING: 1 = NONE 2 = SOME 3 = COMPLETE		
1	INTERSTICES: 1 = SHALLOW 2 = MEDIUM DEEP 3 = DEEP		

## 8. RIND TEXTURE:

2	1 = SOFT	2 = FIRM	3 = HARD	<input type="text"/> <input type="text"/> mm THICKNESS AT MEDIAL
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## 9. RIND COLOR (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW     )

01 = WHITE 02 = CREAM 03 = BUFF 04 = YELLOW 05 = GOLD 06 = GREEN 07 = ORANGE 08 = BRONZE  
 09 = BROWN 10 = GRAY 11 = BLACK 12 = OTHER (Specify) \_\_\_\_\_

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	PRIMARY COLOR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	MOTTLING COLOR
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	NET COLOR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	FURROW (SUTURE) COLOR

## RIND COLOR (AT FULL MATURITY)

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	PRIMARY COLOR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	MOTTLING COLOR
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	NET COLOR	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	FURROW (SUTURE) COLOR

## 10. FLESH (AT EDIBLE MATURITY):

COLORS: (SELECT TWO WHEN NECESSARY, i.e., CREAMY YELLOW   )

1 = WHITE 2 = CREAM 3 = YELLOW 4 = GREEN 5 = ORANGE 6 = SALMON 7 = PINK  
 8 = OTHER (Specify) \_\_\_\_\_

<input type="text"/>	<input type="text"/>	COLOR NEAR CAVITY	<input type="text"/>	<input type="text"/>	COLOR IN CENTER	<input type="text"/>	<input type="text"/>	COLOR NEAR RIND
<input type="text"/>	<input type="text"/>	REFRACTOMETER % SOLUABLE SOLIDS (CENTER OF FLESH)						
<input type="text"/>	<input type="text"/>	% SOLUABLE SOLIDS FOR CHECK VARIETY (Specify variety _____)						
<input type="text"/>	<input type="text"/>	AROMA: 1 = ABSENT 2 = FAINT 3 = STRONG						
<input type="text"/>	<input type="text"/>	FLAVOR: 1 = MILD 2 = SOMEWHAT SPICY 3 = VERY SPICY						

## 11. SEED CAVITY:

<input type="text"/>	<input type="text"/>	<input type="text"/>	mm LENGTH	<input type="text"/>	<input type="text"/>	mm WIDTH
<input type="text"/>	SHAPE IN X-SECTION: 1 = CIRCULAR 2 = TRIANGULAR					

## 12. SEEDS:

<input type="text"/>	<input type="text"/>	<input type="text"/>	NO. PER FRUIT	<input type="text"/>	<input type="text"/>	<input type="text"/>	gm PER 1,000
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## 13. DISEASE RESISTANCE \* (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

<input type="text"/>	BACTERIAL WILT	<input type="text"/>	ROOT ROT	<input type="text"/>	CROWN BLIGHT	<input type="text"/>	MELON RUST
<input type="text"/>	POWDERY MILDEW	<input type="text"/>	VERTICILLUM WILT	<input type="text"/>	SULPHUR BURN	<input type="text"/>	SCAB
<input type="text"/>	WATERMELON MOSAIC	<input type="text"/>	DOWNY MILDEW	<input type="text"/>	FUSARIUM WILT	<input type="text"/>	ROOT KNOT (NEMATODE)
<input type="text"/>	ANTHRACNOSE	<input type="text"/>	CUCUMBER MOSAIC	<input type="text"/>	SQUASH MOSAIC	<input type="text"/>	OTHER _____
				<input type="text"/>	OTHER _____	<input type="text"/>	OTHER _____

\* STATE GENUS, SPECIES, AND RACES WHEN KNOWN, UNDER ITEM 16.



14. INSECT RESISTANCE: (0 = UNTESTED, 1 = SUSCEPTIBLE, 2 = RESISTANT)

<input type="checkbox"/> 0	APHID	<input type="checkbox"/> 0	PICKLE WORM	<input type="checkbox"/> 0	DARKLING GROUND-BEETLE	<input type="checkbox"/> 0	BANDED CUCUMBER BEETLE
<input type="checkbox"/> 0	MITE	<input type="checkbox"/> 0	WESTERN SPOTTED CUCUMBER BEETLE	<input type="checkbox"/> 0	MELON LEAFHOPPER	<input type="checkbox"/> 0	OTHER (Specify)
<input type="checkbox"/> 0	MELON WORM	<input type="checkbox"/> 0	WESTERN STRIPED CUCUMBER BEETLE	<input type="checkbox"/> 0	MELON LEAFMINER		

15. NAME A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED FOR THE FOLLOWING CHARACTERISTICS:

CHARACTER	VARIETY	CHARACTER	VARIETY
DAYS MATURITY	45 SJ	FRUIT SHAPE	45 SJ
PLANT VIGOR	"	RIND COLOR	"
PLANT HABIT	"	FLESH AROMA	"
FRUIT NETTING	"	FLESH FLAVOR	"
FRUIT SIZE	"	FLESH COLOR	"

16. ADDITIONAL INFORMATION AND COMMENTS:

Plant Variety Protection Application  
Asgrow Seed Company  
Cantaloupe - ~~XP-750~~ *CUSTO 45*  
February 28, 1973

EXHIBIT E

STATEMENT OF THE BASIS OF APPLICANTS OWNERSHIP.

The new plant variety, Cantaloupe <sup>*CUSTO 45*</sup> ~~XP-750~~, was developed under the investigation, support, and corporate objectives of Asgrow Seed Company (a subsidiary of The Upjohn Company) utilizing contributive parent stocks and facilities owned or controlled by the company.